

## WEST Search History

DATE: Tuesday, July 23, 2002

**Set Name**   **Query**  
side by side

**Hit Count**   **Set Name**  
result set

*DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR*

L3      L2 near5 (array\$ or librar\$)  
L2      (polycarbonate\$)near2(cover\$ or lid\$ or film\$)  
L1      (polcarbonate\$)near2(cover\$ or lid\$ or film\$)

3      L3  
7912      L2  
0      L1

END OF SEARCH HISTORY

**WEST**

Generate Collection

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L3: Entry 2 of 3

File: USPT

DOCUMENT-IDENTIFIER: US 6045208 A

TITLE: Ink-jet recording device having an ultrasonic generating element array

Detailed Description Text (146):

For the electroforming stamper 26a, a transfer pattern is prepared on whose surface a plurality of projecting parallel tracks that have a rectangular cross section and have a height in rectangle of  $\lambda/2 = 8 \mu\text{m}$  from the main plane, are formed. The stamper is mounted on the movable support 26c. To the projecting pedestal 26f of the fixed support 26, the piezoelectric element array (10) has been secured temporarily. On the array, a polycarbonate resin film 29a with a thickness of about  $20 \mu\text{m}$  is coated.

Detailed Description Text (150):

An electroforming stamper 26a is prepared which has a transfer pattern on whose surface a plurality of projecting parallel tracks that have a rectangular cross section and have a height in rectangle of  $\lambda/2 = 8 \mu\text{m}$  from the main plane, are formed. The stamper is mounted on the movable support 26c. To the projecting pedestal 26f of the fixed support 26, the piezoelectric element array 10 has been secured temporarily. On the array, an uncured polycarbonate resin film with a thickness of about  $10 \mu\text{m}$  is applied to form a resin coating layer.

**WEST****End of Result Set**

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L3: Entry 3 of 3

File: EPAB

Jul 16, 1998

DOCUMENT-IDENTIFIER: WO 9830317 A1

TITLE: MEMBRANE MICROFILTER MANUFACTURING PROCESS

Abstract (1):

CHG DATE=19990617 STATUS=O>A membrane microfilter is formed by ablative drilling of an array of pores through a polycarbonate film (14) using an ultraviolet or visible light laser. Pulses of radiation from the laser (2) are formed into beams (22) of less than pore size using a lens system (12) or mask (20), the intensity of the beams (22) being sufficient to cause ablation of the film (14).

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L3: Entry 1 of 3

File: PGPB

Apr 18, 2002

DOCUMENT-IDENTIFIER: US 20020044171 A1

TITLE: INK-JET RECORDING DEVICE

Detail Description Paragraph (148):

[0322] For the electroforming stamper 26a, a transfer pattern is prepared on whose surface a plurality of projecting parallel tracks that have a rectangular cross section and have a height in rectangle of  $\lambda/2=8 \mu\text{m}$  from the main plane, are formed. The stamper is mounted on the movable support 26c. To the projecting pedestal 26f of the fixed support 26, the piezoelectric element array 10 has been secured temporarily. On the array, a polycarbonate resin film 29a with a thickness of about  $20 \mu\text{m}$  is coated.

Detail Description Paragraph (152):

[0325] An electroforming stamper 26a is prepared which has a transfer pattern on whose surface a plurality of projecting parallel tracks that have a rectangular cross section and have a height in rectangle of  $\lambda/2=8 \mu\text{m}$  from the main plane, are formed. The stamper is mounted on the movable support 26c. To the projecting pedestal 26f of the fixed support 26, the piezoelectric element array 10 has been secured temporarily. On the array, an uncured polycarbonate resin film with a thickness of about  $10 \mu\text{m}$  is applied to form a resin coating layer.

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L3: Entry 1 of 3

File: PGPB

Apr 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020044171  
PGPUB-FILING-TYPE: new  
DOCUMENT-IDENTIFIER: US 20020044171 A1

TITLE: INK-JET RECORDING DEVICE

PUBLICATION-DATE: April 18, 2002

## INVENTOR-INFORMATION:

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HIRAHARA, SHUZO	YOKOHAMA-SHI		JP	
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APPL-NO: 09/ 415072 [PALM]

DATE FILED: October 12, 1999

CONTINUED PROSECUTION APPLICATION: This is a publication of a  
continued prosecution application (CPA) filed under 37 CFR 1.53(d).

RELATED-US-APPL-DATA: \*\*\* TEST \*\*\*

Application 09/415072 is a division-of US application 08/501259,  
filed July 11, 1995, US Patent No. 6045208

FOREIGN-APPL-PRIORITY-DATA:

COUNTRY	APPL-NO	DOC-ID	APPL-DATE
JP	6-158515	1994JP-6-158515	July 11, 1994
JP	6-238102	1994JP-6-238102	September 30, 1994
JP	7-045661	1995JP-7-045661	March 6, 1995
JP	7-047290	1995JP-7-047290	March 7, 1995

INT-CL: [07] B41 J 2/135

US-CL-PUBLISHED: 347/46

US-CL-CURRENT: 347/46

REPRESENTATIVE-FIGURES: 2B

ABSTRACT:

An ink-jet recording apparatus according to the present invention, which records an image onto a recording medium by flying an ink-droplet from a surface of an ink by a pressure of ultrasonic beam, is characterized by comprising ultrasonic generating element array which has a plurality of ultrasonic elements arranged in array for emitting ultrasonic beams, driving means for applying a plurality of pulses having different phases each other to converging ultrasonic beams by interfering said plurality of ultrasonic beams with each other emitted from said ultrasonic generating elements of a part of said ultrasonic generating element array, which are simultaneously driven, with sequentially shifting said ultrasonic generating elements simultaneously driven to an array direction, and converging means for converging each of said plurality of ultrasonic beams in a direction of perpendicular to the array direction.

L Number	Hits	Search Text	DB	Time stamp
1	637289	membrane\$4 or film\$4	USPAT; US-PGPUB	2002/07/23 09:23
2	60209	(high adj throughput adj screening) or combinator\$4 or librar\$4 or microtiter	USPAT	2002/07/23 09:25
3	137840	diffusion\$4	USPAT	2002/07/23 09:25
4	637240	gas	USPAT	2002/07/23 09:26
5	0	(membrane\$4 or film\$4) same ((high adj throughput adj screening) or combinator\$4 or librar\$4 or microtiter) same diffusion\$4 same gas	USPAT	2002/07/23 09:26
6	10	(membrane\$4 or film\$4) same ((high adj throughput adj screening) or combinator\$4 or librar\$4 or microtiter) same diffusion\$4 and gas	USPAT	2002/07/23 09:35
7	1785	microtiter same (film\$4 or membrane\$4)	USPAT	2002/07/23 12:09
8	2	diffusion\$4 same (microtiter same (film\$4 or membrane\$4))	USPAT	2002/07/23 09:52
9	15	gas same (microtiter same (film\$4 or membrane\$4))	USPAT	2002/07/23 12:08
12	40	microtiter same (film\$4 or membrane\$4)	EPO; JPO; DERWENT; IBM_TDB	2002/07/23 12:10
13	2	microtiter same (film\$4 or membrane\$4) same gas	EPO; JPO; DERWENT; IBM_TDB	2002/07/23 12:49
14	1	("6159272").PN.	USPAT	2002/07/23 13:29
15	1	("6030917").PN.	USPAT	2002/07/23 14:16
16	1	("6197575").PN.	USPAT	2002/07/23 14:48
18	132	selective adj permeable adj membrane	USPAT	2002/07/23 14:49
19	1830360	microtiter or wells	USPAT	2002/07/23 14:49
20	17	(selective adj permeable adj membrane) same (microtiter or wells)	USPAT	2002/07/23 14:51
21	29	(selective adj permeable adj membrane) same gas	USPAT	2002/07/23 14:51
-	17	gas and (high adj throughput adj screening)and plate and array and solid-phase and permeable	USPAT; US-PGPUB	2002/07/23 09:22
-	592248	membrane\$4 or film\$4	USPAT	2002/07/23 09:14
-	320820	(high adj throughput adj screening) or combinator\$4 or librar\$4 or array\$4	USPAT	2002/07/23 09:24
-	4795	diffusion adj coefficient	USPAT	2002/07/23 09:16
-	6	(membrane\$4 or film\$4) same ((high adj throughput adj screening) or combinator\$4 or librar\$4 or array\$4) same (diffusion adj coefficient)	USPAT	2002/07/23 09:16

et	Items	Description
S1	1205884	POLYCARBONATE OR PERFLUOROETHYLENE OR POLYAMIDE OR POLYEST- ER OR POLYPROPYLENE OR POLYETHYLENE
S2	3721547	MEMBRANE? OR FILM? OR COVERING? OR SHEET?
S3	4336077	SCREEN? OR ARRAY? OR CHIP? OR COMBINATOR? OR LIBRAR? OR PL- URALITY OR ASSAY?
S4	1842903	PERMEABLE? OR TRANSPORT?
S5	26345	S1 (S) S2 (S) S3 (S) S4
S6	7232	DIFFUSION(W) COEFFICIENT
S7	108	S5 (S) S6
S8	1996528	GAS
S9	65	S7 AND S8
S10	54	S9 AND PY<=2000
S11	382	MONOFILM? OR COEXTRUSTION?
S12	1020433	MONOFILM? OR COEXTRUSTION? OR COMPOSITE? OR LAMINATE?
S13	35	S10 AND S12
S14	4483376	PLATE OR MICROTITER OR WELL
S15	34	S13 AND S14
?		